



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,086	12/21/2001	Robert E. Denman	22171.299	1095
27683	7590	11/02/2006		
HAYNES AND BOONE, LLP 901 MAIN STREET, SUITE 3100 DALLAS, TX 75202				
			EXAMINER PHILLIPS, HASSAN A	
			ART UNIT 2151	PAPER NUMBER

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/028,086

Applicant(s)

DENMAN ET AL.

Examiner

Hassan Phillips

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is in response to communications filed July 21, 2006. A conference has been held in response to the Pre-Appeal Brief Request for Review filed July 21, 2006. In accordance with the panel decision, the examiner is reopening prosecution. The final rejection is therefore withdrawn.

### ***Response to Arguments***

2. Applicant's arguments filed July 21, 2006 have been fully considered but they are not persuasive. Applicant argued:

- a) The limitation of "registering a contact for the user for media transmissions to other users in the group; wherein the contact for the user is the PTT server" (independent claim 5) is missing from Maggenti;
- b) The limitation of "wherein the multicasting includes use of network address and port translation by the PTT server, whereby the PTT server replaces a destination IP address of a port number of received speech packets with an IP address of a port number of each target user and unicasts modified packets to each target user" (dependent claim 17) is missing from Maggenti; and,
- c) The limitation of "redirecting the SIP SUBSCRIBE to a PTT Server for purposes of removing the calling party and the called party from a multicast group" (independent claims 26 and 36) is not met by Maggenti.

Examiner respectfully disagrees with applicant's assertions.

3. Regarding item a), as indicated in previous actions examiner maintains Maggenti discloses the limitations of "registering a contact for the user for media transmissions to other users in the group; wherein the contact for the user is the PTT server" at least in col. 10, lines 46- 55 which recites:

In order to participate in a specific net, CD 202 initially requests that CM 218 add CD 202 to a list of connected net participants for the desired net. ***The term "connected" means those users who have registered with CM 218 and are at least receiving communications occurring in a net. Hence, CD 202 will initially know or be able to learn the net-address of any nets in which it wishes to participate.*** Further, CD 202 will initially know or be able to be configured with the address of a top-level server to which SIP requests may be sent.

Examiner maintains this passage clearly indicates it is inherent that the PTT Server is the contact for the user because not only does a user have to register with the CM (i.e. PTT server) to connect to net participants, a user will also initially know or be able to learn the group address of any group it wishes to participate in from the PTT Server.

4. With regards to b), although not recited identically as claimed by applicant, it is clear Maggenti discloses applicants claimed "wherein the multicasting includes use of network address and port translation by the PTT server, whereby the PTT server replaces a destination IP address of a port number of received speech packets with an IP address of a port number of each target user and unicasts modified packets to each target user" at least in the passage cited by the examiner (Maggenti, col. 6 line 62 through col. 7, line 7). This passage clearly shows the CM (i.e. PTT server) unicasting

modified packets to each target user where Maggenti discloses "CM 218 then provides the information to the net members by duplicating the information and sending each duplicate to the net members". Furthermore, network address and port translation is inherent in this passage as this is conventional for PTT communications, and without it a target user would never receive the speech packet intended for that user.

5. With regards to c), as indicated in previous actions, examiner acknowledges Maggenti fails to expressly disclose redirecting the SIP SUBSCRIBE to a PTT Server for purposes of removing the calling party and the called party from a multicast group. Nevertheless, examiner maintains if not implicit in the teachings of Maggenti, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Maggenti to show redirecting a SIP SUBSCRIBE to the PTT server for purposes of removing the calling party and the called party from a multicast group to support a private call between a calling party and a called party, (Maggenti, col. 20, lines 26-30).

6. Accordingly the references supplied by the examiner in the previous office action covers the claimed limitations. The rejections of claims 5-34, are thus sustained. Applicant is requested to review the prior art of record for further consideration.

7. Applicant's arguments with respect to claim 1 has been considered but is moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 5-19, 23, 35, are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Maggenti et al. (hereinafter Maggenti), U.S. Patent 6,477,150.

10. In considering claim 5, Maggenti teaches a method for user activation of push-to-talk (PTT) service in a wireless communication network, comprising: initiating a session with a PTT server wherein a user joins a group, (col. 10, lines 46-55); registering a contact for the user for media transmissions to other users in the group, (col. 10, lines 46-55); wherein the contact for the user is the PTT server, (col. 10, lines 46-55).

11. In considering claim 6, Maggenti teaches the group being closed with pre-provisioned members, (col. 10, line 56- col. 11, line 6).

12. In considering claim 7, Maggenti teaches the group being open whereby any user can join, (col. 10, line 56- col. 11, line 6).

13. In considering claim 8, Maggenti teaches initiating a session including invoking a SIP INVITE process, (col. 11, lines 52-59).

14. In considering claim 9, Maggenti teaches a To header of the SIP INVITE including a group specific Uniform Resource Locator, (col. 25, lines 12-28).

15. In considering claim 10, Maggenti teaches registering a contact for the user (col. 10, lines 46-55). Maggenti also teaches operating over the SIP protocol, (col. 7, lines 39-57). Thus, it is inherent in the teachings of Maggenti that registering a contact for the user includes invoking a SIP REGISTER process, since SIP REGISTER is a conventional method.

16. In considering claim 11, Maggenti teaches registering a contact for the user including registering a group specific Uniform Resource Locator, (col. 10, lines 46-55).

17. In considering claim 12, Maggenti teaches the PTT server functioning as a SIP user agent server (col. 11, line 60-col. 12, line 2), and as a multicast router (col. 22, lines 51 -58).

18. In considering claim 13, Maggenti teaches the contact for the user being a SIP URL for the group in the PTT server, (col. 26, lines 5-43).

19. In considering claim 14, Maggenti teaches initiating a session with the PTT server including the PTT server adding the IP address of the user's mobile device to a multicast group, (col. 10, lines 46-55).

20. In considering claims 15 and 35, Maggenti teaches a method for push-to-talk (PTT) group calls for users in a wireless communication network, comprising: receiving at a PTT server from a mobile device to request the group's speech token, (col. 6, lines 11-23); transmitting an acknowledge message to the mobile device from the PTT Server wherein the acknowledge message includes a speech token, (col. 6, lines 11-23); receiving by the PTT server, a half-duplex speech communication from the mobile device, (col. 20, lines 26-30); multicasting the half-duplex speech communication from the PTT server to other members of a group, (col. 4, lines 49-59, col. 22, lines 51-58); releasing the speech token, (col. 6, lines 11-23); and notifying the group members that the speech token is available, (col. 6, lines 11-23, col. 31, lines 38-48). Maggenti also teaches operating over the SIP protocol, (col. 7, lines 39-57). Thus, it is inherent in the teachings of Maggenti that a SIP SUBSCRIBE is transmitted to the PTT server from the mobile device to request the group's speech token, since SIP SUBSCRIBE is a conventional method.



21. In considering claim 16, it is inherent in the teachings of Maggenti that multicasting includes use of a Class D Multicast address, (col. 4, lines 49-59, col. 22, lines 51-58).

22. In considering claim 17, Maggenti teaches the multicasting including use of network address and port translation by the PTT server, whereby the PTT server replaces a destination IP address of a port number of received speech packets with an IP address of a port number of each target user and unicasts modified packets to each target user, (col. 6, line 62-col. 7, line 7).

23. In considering claim 18, Maggenti teaches authorizing priority members to pre-empt any other group member who has been granted the speech token, (col. 30, line 63-col. 31, line 9).

24. In considering claim 19, Maggenti teaches identifying the caller to target users, (col. 12, line 64-col. 13, line 11 ).

25. In considering claim 23, Maggenti teaches sending a releasing member the status of the token in the response to the releasing SUBSCRIBE request, (col. 31, lines 38-59).

***Claim Rejections - 35 USC § 103***

26. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

27. Claims 1-4, 20-22, 24-34, 36, are rejected under 35 U.S.C. 103(a) as being unpatentable over Maggenti.

28. In considering claim 1, Maggenti teaches a wireless communication network including push-to-talk (PTT) functionality, comprising: a Session Initiation Protocol (SIP) Proxy Server (218), (col. 5, lines 38-55, Fig.'s 2 and 6); a SIP Registrar and Location Server (218) operable to store contact addresses of active mobile devices, (col. 7, lines 15-28, Fig.'s 2 and 6); a PTT Server (218) operable to function as a call endpoint for each of a plurality of mobile devices wherein the plurality of mobile devices are segmented into membership groups, the PTT Server further operable to multicast a communication from one member of the group to the other members of the group, (col. 4, line 49-col. 5, line 46, col. 22, lines 45-58, Fig.'s 2 and 6); and an Internet Protocol (IP) network (214) connected to the SIP Proxy server, the SIP Registrar and Location Server, and the PTT Server, (col. 15, lines 28-37, Fig.'s 2 and 6).

Although the teachings of Maggenti disclose substantial features of the claimed invention, they fail to expressly disclose: the IP network interconnecting the SIP Proxy server, the SIP Registrar and Location Server, and the PTT Server.

Nevertheless, it was well known in the art to have different functionality of one server separated and provided in multiple servers interconnected by an IP network. Maggenti exemplifies this where Maggenti teaches the SIP Proxy server, the SIP Registrar and Location Server, and the PTT Server optionally including a modem bank (224), or being interconnected to the modem bank via the IP network, (col. 7, lines 58-60, also see Fig. 2). Furthermore, having the SIP Proxy server, the SIP Registrar and Location Server, and the PTT Server interconnected by the IP network, or having them all located in one server as taught by Maggenti is a field of use limitation and not of patentable distinction.

Thus, it would have been obvious to one of ordinary skill in the art to modify the teachings of Maggenti to disclose the IP network interconnecting the SIP Proxy server, the SIP Registrar and Location Server, and the PTT Server. This would have simply been a designer's choice in implementing the system and method for providing group communication services as taught by Maggenti, (col. 7, lines 58-60, also see Fig. 2).

29. In considering claim 2, Maggenti teaches the PU server operates as a signaling endpoint and a back-to-back user agent, (col. 6, line 62 through col. 7, line 14, and col. 20, lines 49-57, Fig. 6).

30. In considering claim 3, Maggenti teaches a subscriber database operable to store subscriber data, (col. 7, lines 15-28, Fig. 6).

31. In considering claim 4, Maggenti teaches a radio access network operable to wirelessly link the plurality of mobile devices to the IP network, (col. 6, lines 24-47, Fig. 2).

32. In considering claim 20, although the teachings of Maggenti disclose substantial features of the claimed invention, they fail to expressly disclose: SIP INFO and NOTIFY messages being used to convey a calling party ID.

Nevertheless, INFO and NOTIFY messages are conventional SIP messages and were well known in the art at the time of the present invention for mid-call signaling information exchanging, and event notification after an explicit/implicit subscription, respectively.

Thus, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Maggenti to show SIP INFO and NOTIFY messages being used to convey a calling party ID. This would have advantageously provided a conventional means for identifying callers to target users, (Maggenti, col. 12, line 64-col. 13, line 11).

33. In considering claims 21 and 30, although the teachings of Maggenti disclose substantial features of the claimed invention, they fail to expressly disclose: sending a SIP INFO message indicating the speech token is available.

Nevertheless, INFO messages were well known in the art at the time of the present invention for mid-call signaling information exchanging.

Thus, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Maggenti to show sending a SIP INFO message indicating the speech token is available. This would have advantageously provided a conventional means for notifying group members that a speech token is available, (Maggenti, col. 6, lines 11-23, col. 31 , lines 38-48).

34. In considering claims 22 and 31, although the teachings of Maggenti disclose substantial features of the claimed invention, they fail to expressly disclose: sending a SIP NOTIFY message indicating the speech token is available.

Nevertheless, NOTIFY messages were well known in the art at the time of the present invention for event notification after an explicit/implicit subscription.

Thus, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Maggenti to show sending a SIP NOTIFY message indicating the speech token is available. This would have advantageously provided a conventional means for notifying group members that a speech token is available, (Maggenti, col. 6, lines 11-23, col. 31 , lines 38-48).

35. In considering claims 24 and 32, although the teachings of Maggenti disclose substantial features of the claimed invention, they fail to expressly disclose: notifying the

group members that the speech token is available including multicasting a pre-stored tone from the PTT server.

Nevertheless, Maggenti teaches notifying the group members that the speech token is available, (col. 31 , lines 38-48), and notifying a requesting group member that a speech token has been granted by means of a pre-stored tone, (col. 6, lines 11-23).

Thus, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Maggenti to show notifying the group members that the speech token is available including multicasting a pre-stored tone from the PTT server. This would have advantageously allowed for group members to audibly determine whether the speech token was available, (Maggenti, col. 6, lines 11-23, col. 31 , lines 38-48).

36. In considering claim 25, although the teachings of Maggenti disclose substantial features of the claimed invention, they fail to expressly disclose: queuing the request for the speech token until the speech token is available.

Nevertheless, queuing was well known in the art at the time of the present invention. Also, Maggenti teaches denying a request for the speech token until the speech token is available, (col. 5, lines 26-37).

Thus, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Maggenti to show queuing the request for the speech token until the speech token is available, and processing the queued request to acquire the speech token when the speech token becomes available. This would have advantageously

allowed for a user to receive the speech token when it becomes available by only pressing the PTT button once, (Maggenti, 01. 6, line 47-col. 7, line 7).

37. In considering claims 26 and 36, Maggenti teaches a method for PTT private calls for users in a wireless communications network, comprising: selecting a called party private identification for a private call by a calling party on a mobile device, (col. 20, lines 26-30); selecting a PTT function on the mobile device, (col. 20, lines 26-30); transmitting to request a speech token, (col. 6, lines 11-23); redirecting a request, (col. 25, lines 51-57); receiving an acknowledge message that includes a speech token, (col. 6, lines 11-23); communicating speech packets from the calling party to the called party in a half-duplex manner, (col. 20, lines 26-30); transmitting to release the speech token, (col. 6, lines 11-23); notifying the calling and called parties that the group's speech token is available, (col. 6, lines 11-23, col. 31, lines 38-48). Maggenti also teaches operating over the SIP protocol, (col. 7, lines 39-57). Thus, it is implicit in the teachings of Maggenti that a SIP SUBSCRIBE is transmitted to the PTT server from the mobile device to request the group's speech token, since SIP SUBSCRIBE is a conventional method.

Although the teachings of Maggenti disclose substantial features of the claimed invention, they fail to expressly disclose: redirecting a SIP SUBSCRIBE to the PTT server for purposes or removing the calling party and the called party from a multicast group.

Nevertheless, the teachings of Maggenti provide a means for redirecting a SIP SUBSCRIBE to the PTT server for purposes or removing the calling party and the called

party from a multicast group, (col. 6, line 62-col. 7, line 7, col. 20, lines 26-30, col. 25, lines 51-57).

Thus, if not implicit, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Maggenti to show redirecting a SIP SUBSCRIBE to the PTT server for purposes or removing the calling party and the called party from a multicast group. This would have advantageously provided a means for supporting a private call between a calling party and a called party, (Maggenti, col. 20, lines 26-30).

38. In considering claim 27, although the teachings of Maggenti disclose substantial features of the claimed invention, they fail to expressly disclose: transmitting the calling party information using a SIP NOTIFY message.

Nevertheless, NOTIFY messages were well known in the art at the time of the present invention for event notification after an explicit/implicit subscription.

Thus, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Maggenti to show transmitting the calling party information using a SIP NOTIFY message. This would have advantageously provided a conventional means for transmitting calling party information from the PTT Server to the called party, (Maggenti, col. 12, line 64-col. 13, line 11)

39. In considering claim 28, although the teachings of Maggenti disclose substantial features of the claimed invention, they fail to expressly disclose: transmitting the calling party information using an INFO message.



Nevertheless, INFO messages were well known in the art at the time of the present invention for mid-call signaling information exchanging.

Thus, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Maggenti to show transmitting the calling party information using an INFO message. This would have advantageously provided a conventional means for transmitting calling party information from the PTT Server to the called party, (Maggenti, col. 12, line 64-col. 13, line 11).

40. In considering claim 29, the teachings of Maggenti provide a means for sending a response to the SIP SUBSCRIBE that requested releasing of the private-call speech, (col. 31, lines 38-59).

41. In considering claim 33, the teachings of Maggenti provide a means for reinstating the calling party and the called party as part of the group upon termination of the private call, (col. 4, lines 49-59, col. 20, lines 26-30).

42. In considering claim 34, the teachings of Maggenti provide a means for restoring the IP addresses of the parties' mobile device to the group's multicast group, (col. 6, line 62-col. 7, line 7, col. 4, lines 49-59, col. 20, lines 26-30, col. 25, lines 51-57).

### ***Double Patenting***

43. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or

Art Unit: 2151

discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

44. Claims 1 and 26, are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 and 37, of copending Application No. 10/137,551. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

45. With regards to the amendments made to claims 1-5, and 16, of copending Application No. 10/028,091, examiner has withdrawn the provisional double patenting rejection of claims 1-5.

### **Conclusion**


46. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is 571-272-3940. The examiner can normally be reached on Mon-Fri (8am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2151

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HP/  
10/23/06



GLENTON B. BURGESS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100